

**Amendments to the Claims:**

The following listing of claims will replace all prior versions, and listings, of claims in the application:

- 1-9. (Canceled)
10. (Previously Presented) A method for producing a single crystal by Czochralski method with pulling a seed crystal from a raw material melt, wherein when a pulling rate of pulling a single crystal is defined as  $V$  (mm/min), a temperature gradient at a solid-liquid interface is defined as  $G$  (K/mm) and a highest temperature at an interface between a crucible and a raw material melt is defined as  $T_{max}$  ( $^{\circ}\text{C}$ ), at least, a range of a value of  $V/G$  ( $\text{mm}^2/\text{K} \cdot \text{min}$ ) including a desired defect region and/or a desired defect-free region is determined according to the  $T_{max}$  ( $^{\circ}\text{C}$ ), and the single crystal is pulled with controlling a value of  $V/G$  ( $\text{mm}^2/\text{K} \cdot \text{min}$ ) within the determined range.
11. (Previously Presented) The method for producing a single crystal according to Claim 10, wherein the single crystal is pulled with controlling the value of  $V/G$  ( $\text{mm}^2/\text{K} \cdot \text{min}$ ) in a range from  $-0.000724 \times T_{max} + 1.31$  to less than  $-0.000724 \times T_{max} + 1.38$ .
12. (Previously Presented) The method for producing a single crystal according to Claim 10, wherein the single crystal is pulled with controlling the value of  $V/G$  ( $\text{mm}^2/\text{K} \cdot \text{min}$ ) in a range of  $-0.000724 \times T_{max} + 1.38$  or more.
13. (Previously Presented) The method for producing a single crystal according to Claim 10, wherein the single crystal is pulled with controlling the value of  $V/G$  ( $\text{mm}^2/\text{K} \cdot \text{min}$ ) in a range from  $-0.000724 \times T_{max} + 1.31$  to  $-0.000724 \times T_{max} + 1.35$ .
14. (Previously Presented) The method for producing a single crystal according to Claim 10, wherein the single crystal is pulled with the  $T_{max}$  ( $^{\circ}\text{C}$ ) being in a range of  $1560^{\circ}\text{C}$  or less.

15. (Previously Presented) The method for producing a single crystal according to Claim 11, wherein the single crystal is pulled with the  $T_{max}$  ( $^{\circ}\text{C}$ ) being in a range of 1560  $^{\circ}\text{C}$  or less.

16. (Previously Presented) The method for producing a single crystal according to Claim 12, wherein the single crystal is pulled with the  $T_{max}$  ( $^{\circ}\text{C}$ ) being in a range of 1560  $^{\circ}\text{C}$  or less.

17. (Previously Presented) The method for producing a single crystal according to Claim 13, wherein the single crystal is pulled with the  $T_{max}$  ( $^{\circ}\text{C}$ ) being in a range of 1560  $^{\circ}\text{C}$  or less.

18. (Previously Presented) The method for producing a single crystal according to Claim 10, wherein, at least, the  $T_{max}$  ( $^{\circ}\text{C}$ ) is changed by providing a heat insulating material between the crucible containing the raw material melt and a heater provided so as to surround the crucible, or by providing a heat insulating material below the crucible.

19. (Previously Presented) The method for producing a single crystal according to Claim 11, wherein, at least, the  $T_{max}$  ( $^{\circ}\text{C}$ ) is changed by providing a heat insulating material between the crucible containing the raw material melt and a heater provided so as to surround the crucible, or by providing a heat insulating material below the crucible.

20. (Previously Presented) The method for producing a single crystal according to Claim 12, wherein, at least, the  $T_{max}$  ( $^{\circ}\text{C}$ ) is changed by providing a heat insulating material between the crucible containing the raw material melt and a heater provided so as to surround the crucible, or by providing a heat insulating material below the crucible.

21. (Previously Presented) The method for producing a single crystal according to Claim 13, wherein, at least, the  $T_{max}$  ( $^{\circ}\text{C}$ ) is changed by providing a heat insulating material between the crucible containing the raw material melt and a heater provided so as to surround the crucible, or by providing a heat insulating material below the crucible.

22. (Previously Presented) The method for producing a single crystal according to Claim 14, wherein, at least, the  $T_{max}$  ( $^{\circ}\text{C}$ ) is changed by providing a heat insulating material between the crucible containing the raw material melt and a heater provided so as to surround the crucible, or by providing a heat insulating material below the crucible.

23. (Previously Presented) The method for producing a single crystal according to Claim 15, wherein, at least, the  $T_{max}$  ( $^{\circ}\text{C}$ ) is changed by providing a heat insulating material between the crucible containing the raw material melt and a heater provided so as to surround the crucible, or by providing a heat insulating material below the crucible.

24. (Previously Presented) The method for producing a single crystal according to Claim 16, wherein, at least, the  $T_{max}$  ( $^{\circ}\text{C}$ ) is changed by providing a heat insulating material between the crucible containing the raw material melt and a heater provided so as to surround the crucible, or by providing a heat insulating material below the crucible.

25. (Previously Presented) The method for producing a single crystal according to Claim 17, wherein, at least, the  $T_{max}$  ( $^{\circ}\text{C}$ ) is changed by providing a heat insulating material between the crucible containing the raw material melt and a heater provided so as to surround the crucible, or by providing a heat insulating material below the crucible.

26. (Previously Presented) The method of producing a single crystal according to Claim 10, wherein a silicon single crystal is pulled as the single crystal.

27. (Previously Presented) The method of producing a single crystal according to Claim 10, wherein a single crystal with a diameter of 200mm or more is pulled as the single crystal.

28. (Canceled)